CLAIMS

1. A system for controlling upsets comprising:

variable power supply means for supplying power to a circuit;

controller means for providing a first instruction to said variable power supply means to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low; and

actuating means for sending an actuating signal to said controller means.

2. The invention of Claim 1 wherein said controller means is a ground station and said actuating means is a ground crew.

3. The invention of Claim 1 wherein said actuating means is a pre-programmed clock.

4. The invention of Claim 3 wherein said pre-programmed clock is the system clock.

5. The invention of Claim 1 wherein said actuating means is an ambient radiation monitor.

6. The invention of Claim 1 wherein said actuating means is an error rate monitor.

7. The invention of Claim 1 further comprising a variable frequency clock means for regulating the clock rate of said microcircuit whereby power consumption of said circuit is maintained constant.

8. A system for controlling upsets comprising:

a variable power supply connected to a circuit;

a controller connected to said variable power supply; said controller designed to provide a first instruction to said variable power supply to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low; and

an actuator designed to send an actuating signal to said controller.

9. The invention of Claim 8 wherein said controller is a ground station and said actuator is a ground crew.

10. The invention of Claim 8 wherein said actuator is a pre-programmed clock.

11. The invention of Claim 10 wherein said pre-programmed clock is the system clock.

12. The invention of Claim 8 wherein said actuator is an ambient radiation monitor.

13. The invention of Claim 8 wherein said actuator is an error rate monitor.

14. The invention of Claim 8 further comprising a variable frequency clock connected to said circuit.

15. A method of controlling upsets comprising the steps of:

supplying power to a circuit;

providing a first instruction to a variable power supply to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low; and

sending an actuating signal to a controller.

16. The invention of Claim 15 wherein said supply voltage is varied by remote control.

17. The invention of Claim 15 wherein said supply voltage is varied as a function of time.

18. The invention of Claim 15 wherein said supply voltage is varied as a function of local radiation.

19. The invention of Claim 15 wherein said supply voltage is varied as a function of error rate in said circuit.

20. The invention of Claim 15 additionally comprising the step of varying the clock rate of said circuit in order to keep power consumption constant.

21. A method of controlling upsets in a circuit comprising the steps of:

providing a variable power supply;

connecting said variable power supply to said circuit;

providing a controller; said controller designed to provide a first instruction to said variable power supply to increase the voltage supplied to said circuit when susceptibility to upsets is high and a second instruction to decrease the voltage supplied to said circuit when susceptibility to upsets is low.

connecting said controller to said variable power supply;

providing an actuator designed to send a signal to said controller to cause said controller to provide said instructions; and

sending said signal.

22. The invention of Claim 21 wherein said controller is a ground station and said actuator is a ground crew.

23. The invention of Claim 22 wherein said actuator is a pre-programmed clock.

24. The invention of Claim 23 wherein said pre-programmed clock is the system clock.

25. The invention of Claim 22 wherein said actuator is an ambient radiation monitor.

26. The invention of Claim 22 wherein said actuator is an error rate monitor.

27. The invention of Claim 21 further comprising the steps of:

providing a variable frequency clock and

connecting said variable frequency clock to said microcircuit whereby power consumption of said circuit is maintained constant.